

E. Unintentional and Intentional Injuries

An injury is “any unintentional or intentional damage to the body resulting from acute exposure to thermal, mechanical, electrical, or chemical energy or from the absence of such essentials as heat or oxygen.”¹ Examples of unintentional injuries are falls, burns, motor vehicle crashes, poisonings, and drowning. Examples of intentional injuries are suicides, homicides, and assaults such as sexual assault, intimate partner violence, and child or elder abuse. Most injuries are both predictable and preventable.

In Wisconsin, injury is the leading cause of death for individuals aged 1 to 44 years. In children aged 1 to 14 years, it accounts for more deaths than all other causes combined. Because injury affects primarily young people, it results in more than 40% of the years of potential life lost (YPLL) before 65 years.

“Intentional and Unintentional Injuries and Violence” is one of the 11 health priorities of Wisconsin’s state public health plan, *Healthiest Wisconsin 2010*. In Wisconsin more than 3,000 residents died from injury-related deaths in 2000,

which accounted for over 6% of all deaths in the state. In 2000, accidental deaths were the fifth leading underlying cause of death for all ages combined in Wisconsin and the leading cause of death among males aged 1 to 44 years and females aged 1 to 24 years.

For each injury death, approximately 40 hospitalizations and 1,200 emergency department visits occur. The costs associated with injuries include productive years of life lost in premature death and long-term disability; resources needed for medical care and treatment; and rehabilitation needed for injured persons.

Nationally in 2001, about two-thirds of injury deaths were the result of unintentional (accidental) injuries, and about one-third of injury deaths result from intentional injuries (homicides and suicides). American Indians had the highest age-adjusted all injury rate (71 per 100,000), followed by African Americans (66 per 100,000). The white age-adjusted rate for all injuries was 54 per 100,000, followed by a rate of 27 per 100,000 for Asian and Pacific Islanders.²

IV. Health Status

All Injury

Deaths

- Statewide in Wisconsin, the leading causes of injury death during 1996–2000 were motor vehicle traffic-related crashes, falls, firearms, poisoning, suffocation, drowning/submersion, and death from fire or burns.
- American Indians had the highest age-adjusted injury death rate from motor vehicle traffic-related crashes (28 deaths per 100,000) compared to other racial/ethnic groups. The African American and Hispanic/Latino rates of 9 per 100,000 were the lowest.
- Motor vehicle traffic-related crashes were the leading cause of injury deaths among Asians. On average, 10 deaths occurred annually due to this cause for an age-adjusted rate of 13 per 100,000.
- Deaths attributable to firearms constituted the most frequent cause of injury-related deaths for African Americans in Wisconsin. On average, 82 deaths from firearms occurred each year among African Americans for an annual, age-adjusted rate of 27 deaths per 100,000. In comparison to the white population, African Americans were almost 4 times more likely to die from a firearm-related injury. Most (90%) of African American firearm deaths were among males.

Table 40: Leading causes of injury death, average annual number of deaths and age-adjusted rates by race/ethnicity, Wisconsin, 1996–2000

			African American/Black	American Indian	Asian	Hispanic/Latino	White	All Wisconsin
Motor vehicle traffic	Both sexes	deaths ¹	22.6	12.2	9.8	11.6	700.0	756.2
		death rate ²	8.5	27.6	12.7	9.1	14.3	14.0
Falls	Both sexes	deaths	9.6	2.8	0.8	2.4	526.8	542.4
		death rate	7.1	14.6*	4.2*	4.8*	9.9	9.7
Firearm	Both sexes	deaths	82.0	4.0	4.8	13.2	336.6	440.6
		death rate	26.6	9.1*	7.0*	9.2	7.1	8.4
Poisoning	Both sexes	deaths	27.4	3.4	1.2	7.4	203.0	242.4
		death rate	11.3	8.2*	3.9*	6.1	4.2	4.6
Suffocation	Both sexes	deaths	10.8	1.6	1.6	2.6	123.8	140.4
		death rate	4.2	2.6*	1.8*	2.8*	2.4	2.5
Drowning/submersion	Both sexes	deaths	6.4	0.6	1.4	1.2	28.2	37.8
		death rate	2.0	1.1*	1.5*	1.1*	0.6	0.7
Fire/burn	Both sexes	deaths	6.4	1.6	0.2	0.8	54.6	63.6
		death rate	2.5	4.6*	0.1*	0.4*	1.1	1.2

Source: Wisconsin resident death certificates, Wisconsin Department of Health and Family Services, Bureau of Health Information. Table prepared by the Division of Public Health.

Notes: ¹Deaths are the average annual number of deaths over the 5-year period.

²Death rates are the average annual number of deaths per 100,000 population, age-adjusted to the U.S. year 2000 standard population.

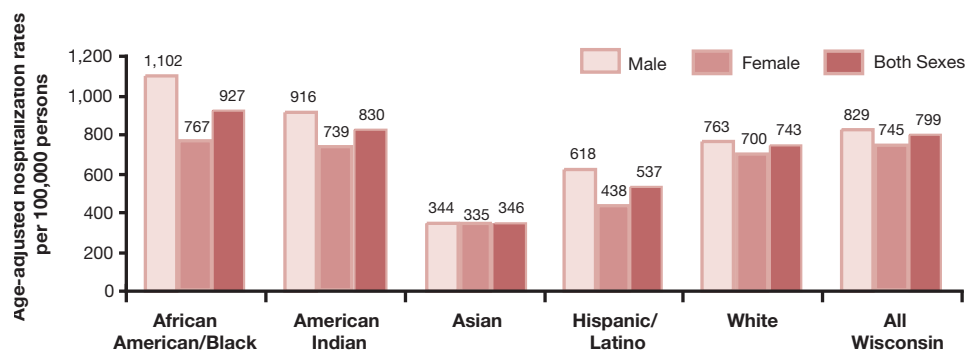
*Rate is based on an annual average of fewer than 5 deaths..

Unintentional and Intentional Injuries

Hospitalizations

- For males and females combined, rates of injury-related hospitalization during 1996–2000 were higher for African American and American Indian populations (927 and 830 per 100,000, respectively) than for whites (743 per 100,000), with the highest rate among African Americans. Compared to the white population, Asians and Hispanics/Latinos were less likely to be hospitalized due to an injury.
- In almost all racial/ethnic populations, males had a higher incidence of hospitalization than females. The difference was greatest for African Americans with an injury-related hospitalization rate of 1,102 per 100,000 for males compared to 767 per 100,000 for females.
- Asian males were two times less likely to be hospitalized for an injury than white males.

Figure 46: Average annual age-adjusted injury hospitalization rates by race/ethnicity and sex, Wisconsin, 1996–2000



Source: Wisconsin inpatient discharge data, Wisconsin Department of Health and Family Services, Bureau of Health Information. Graph prepared by the Wisconsin Public Health and Health Policy Institute, University of Wisconsin-Madison.

Notes: Unintentional injury hospitalizations based on E-Code ICD-9-CM: E800-E869, E880-E829. Rates are age-adjusted to the U.S. year 2000 standard population.

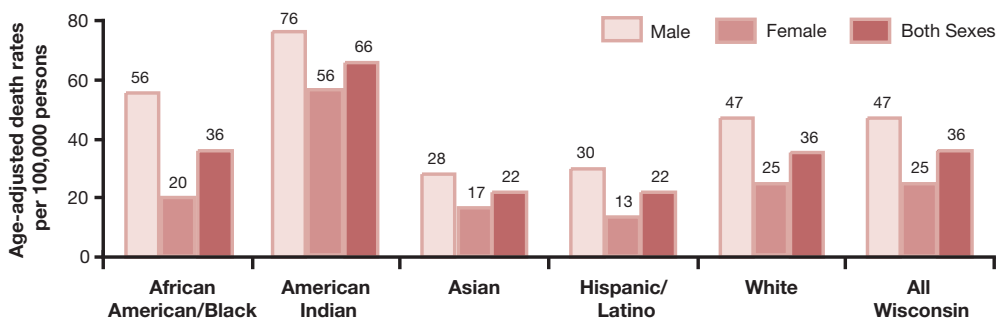
IV. Health Status

Unintentional Injuries

Falls, burns, motor vehicle traffic-related crashes, poisonings, and drownings are examples of unintentional injuries.

- During 1996–2000, unintentional injuries were among the five leading causes of death in Wisconsin for all racial/ethnic groups and statewide. On average, the number of deaths each year due to unintentional injury were the following: African Americans, 85; American Indians, 24; Asians, 15; Hispanic/Latino, 25; whites, 1,756 (Appendix III, Tables R8–R12 and Table R29).
- The highest rate of unintentional injury mortality among racial/ethnic groups was in the American Indian population, with an age-adjusted rate of 66 deaths per 100,000 population. This was almost twice the rate for African Americans and whites, each with a similar rate of 36 deaths per 100,000 due to an unintentional injury.
- Unintentional injury death rates were lowest among the Asians and Hispanics/Latinos, with similar rates of 22 per 100,000.
- In all populations, males had higher unintentional injury death rates than females. American Indian males had the highest unintentional injury death rate at 76 per 100,000. They were followed by African American males (56 per 100,000) and white males (47 per 100,000). Among males, Asians had the lowest death rate due to this cause with 28 deaths per 100,000.
- Statewide, age-specific unintentional injury death rates indicate the greatest risk of death from unintentional injury is at older ages. However, relatively small numbers in the American Indian, Asian, and Hispanic/Latino populations limit age-specific comparisons.

Figure 47: Average annual age-adjusted unintentional injury death rates by race/ethnicity and sex, Wisconsin, 1996–2000



Source: Wisconsin resident death certificates, Wisconsin Department of Health and Family Services, Bureau of Health Information. Graph prepared by the Wisconsin Public Health and Health Policy Institute, University of Wisconsin-Madison.

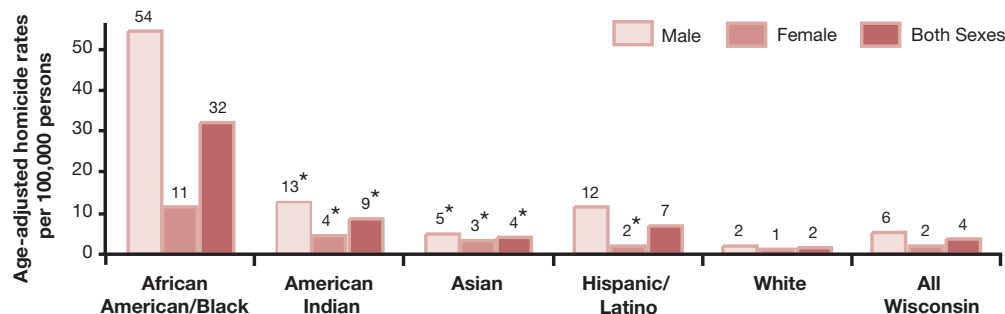
Note: Rates are age-adjusted to the U.S. year 2000 standard population.

Homicide

During 1996–2000, nearly 200 homicides occurred annually in Wisconsin. Despite the much smaller size of the African American population than whites, the annual number of African American homicides, 99, exceeded the number for whites, 80. The average annual number of homicides for other groups were: American Indians, 4; Asians, 3; and Hispanics, 12 (Appendix III, Table R31).

- Homicide was the leading cause of death among African American males and females 15 to 24 years old and African American males 25 to 44 years old.
- The 1996–2000 age-adjusted homicide rate of 32 per 100,000 for African Americans in Wisconsin exceeded the overall rate of homicide in all other racial populations. This rate was 19 times the age-adjusted rate for whites and 9 times higher than the rate for all Wisconsin.
- The second and third highest age-adjusted rates of homicide were reported, for American Indians (9 per 100,000) and Hispanics/Latinos (7 per 100,000).
- The highest homicide rate by race and age was in the African American male population, aged 15 to 24 with a rate of 130 per 100,000. By comparison, the homicide rate for white males in the same age group was 4 per 100,000 (Appendix III, Table R31). African American males were 30 times more likely to experience a homicide death than white males in this age group.
- During 1996–2000, the annual homicide rate for African American males was 54 per 100,000, while the rate for white males was 2 per 100,000. Within the African American population, there were nearly 5 male homicide victims for every one African American female death. Nevertheless, African American females were 11 times more likely than white females to be homicide victims.
- More than half of homicides in Wisconsin are due to firearms.²

Figure 48: Average annual age-adjusted homicide rates by race/ethnicity and sex, Wisconsin, 1996–2000



Source: Wisconsin resident death certificates, Wisconsin Department of Health and Family Services, Bureau of Health Information. Graph prepared by the Wisconsin Public Health and Health Policy Institute, University of Wisconsin-Madison.

Notes: Rates are age-adjusted to the U.S. year 2000 standard population.

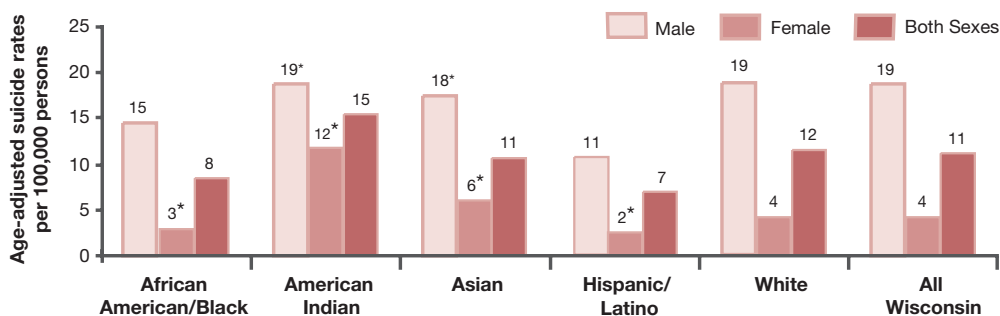
*Rate is based on an annual average of fewer than 5 deaths.

IV. Health Status

Suicide

- During 1996–2000, on average 591 suicides occurred annually in Wisconsin. Most suicides were among whites (549). The annual average number of suicides for the African American population was 21; for American Indians, 7; for Asians, 6; and for Hispanics/Latinos, 7.
- Statewide, suicide was the second leading cause of death in the age group 15 to 24 years. Males are more likely to commit suicide than females, but females are more likely to attempt suicide. The age-adjusted annual death rate due to suicide for 1996–2000 was 11 per 100,000—19 for males and 4 for females.
- The highest suicide death rate among racial populations in Wisconsin occurred in American Indians, with a rate of 15 per 100,000; the lowest rate was 7 per 100,000 for Hispanics/Latinos.
- In all racial/ethnic groups, more males than females committed suicide. African American males were 1.4 times less likely to commit suicide than whites. Hispanic/Latino males were 1.7 times less likely to commit suicide than white men.

Figure 49: Average annual age-adjusted suicide rates by race/ethnicity and sex, Wisconsin, 1996–2000



Source: Wisconsin resident death certificates, Wisconsin Department of Health and Family Services, Bureau of Health Information. Graph prepared by the Wisconsin Public Health and Health Policy Institute, University of Wisconsin-Madison.

Notes: Rates are age-adjusted to the U.S. year 2000 standard population.

*Rate is based on an annual average of fewer than 5 deaths.

Occupational Injury

Deaths

Each year, at least 58,000 people are seriously injured while working in Wisconsin. About 120 Wisconsin workers die annually from worksite injuries. Wisconsin maintains records for all deaths that occur due to occupational causes.

Industries with the largest share of fatalities were construction, transportation, agriculture, and manufacturing. These industries are significant in that they employ a larger share of “blue-collar” workers (e.g., construction laborers, truck drivers, farmers, machine operators) who are at higher risk of worksite injury deaths compared to persons employed in “white collar” jobs (e.g., secretaries, office managers, professionals).

Wisconsin data from the National Institute of Occupational Safety and Health/Fatality Assessment and Control Evaluation (NIOSH/FACE) show that males are at greater risk from worksite injury, and most injured workers were between the ages 18 and 64. The top four worksites where racial or ethnic minority workers died were construction, cashiers, transportation (including taxi drivers), and police and security services.

Table 41: Worksite injury deaths by race/ethnicity and sex, Wisconsin, 1996–2000

	African American/Black	American Indian	Asian/Pacific Islander	Hispanic/Latino	White	Total*
Male	15	2	2	7	416	470
Female	1	0	1	0	45	50
Total	16	2	3	7	468	520

Source: Fatality Assessment and Control (FACE) Data, Wisconsin Department of Health and Family Services, Bureau of Occupational Health.

Note: *The total number column includes 29 “unknown” race, 30 “unknown” ethnicity, and 2 “other” race.

Notes

1. National Committee for Injury Prevention and Control. *Injury Prevention: Meeting the Challenge*. New York, NY: Oxford University Press; 989:4.
2. National Center for Injury Prevention and Control Web-based Injury Statistics Query and Reporting System (WISQARS), 2001.